

USCMS Engineer Status Report for July 2003

Ianna Osborne

August 5, 2003

1 Work Performed This Month

IGUANA:

- o) Extensive testing of the 3D shapes due to problems with Coin3D (wrong reflection of the shapes, NURBS, repetitive crashes of the X server). Bugs and problems reported to Savannah bug reporting system for IGUANA project. Work-around found for the majority of problematic ORCA visualisation classes. Discussed and agreed with PRS/CCS (Stephan, Norbert, Vincenzo, etc.) to temporarily move back to TGS OpenInventor while the rest of the problems will be fixed.

ORCA visualisation:

- o) Moved to the new version of COBRA: mostly modifications in Build-Files;

- o) Replaced IgSoHitsKit by SoPointSet with material and draw style. Collect sim hits directly to SoVertexProperty shape;

- o) Reconstructed tracks visualisation updated: it checks validity of a rechit for a measurement to exclude measurements with $z=0$ to avoid zigzags on 3D track representation.

- o) Tested and released with new compiler gcc 3.2.3.

- o) Particle decay tree: work in progress.

- o) User guide: work in progress.

COBRA (Mantis) visualisation (former OSCAR visualisation):

- o) Tested and released. Waiting for grouppping of the libraries from OSCAR and Mantis. Mostly organizational issues.

2 Plans For Next Month

- o) Particle decay tree: finalize and release;
 - o) ORCA visualisation User guide;
 - o) Started moving from Geant3 to reconstruction geometry (from DDD) for Calorimetry and Muon subsystems, eventually drop visualisation of Geant3 geometry completely.